

Remarks

The Office Action mailed August 5, 2003 and made final has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 15-26 and 30-41 are now pending in this application, of which claim 15 has been amended, and claims 30-41 are newly added. It is respectfully submitted that the pending claims define allowable subject matter.

With respect to the newly added claims, it is respectfully submitted that the claim recitations are not new matter. New independent claims 31, 34, 39 and 41 are supported by at least paragraphs 13, 35, 37 and Figure 8 of the application as filed.

The rejection of Claims 1-15, 18-25 and 29 under 35 U.S.C. § 103 as being unpatentable over Denovich et al. (U.S. Patent No. 6,254,421) in view of Boron et al. (U.S. Patent No. 6,248,977) is respectfully traversed.

Claims 1-14 are cancelled.

Claim 15 recites a connector device capable of being used with an electrical cabling, said device comprising a first connector having a housing and opposing sides, and a second connector having a housing and opposing sides, "at least one of said opposing sides of said first connector being removably connected to one of said sides of said second connector," "whereby said first connector is separable from said second connector as electrical cabling is spliced thereto."

It is respectfully submitted that the cited art is not suggestive of the recitations of claim 15.

Denovich et al. describes and illustrates in Figures 1-5 a compact connector assembly (10) including a wire carrier section (14) pivotably mounted to a housing (12) and adapted to be

Denovich et al. describes and illustrates in Figures 1-5 a compact connector assembly (10) including a wire carrier section (14) pivotably mounted to a housing (12) and adapted to be mounted directly to a circuit board. The carrier section (14) may be pivoted to a wire-receiving position or a wire-terminating position. Notably, Denovich et al. describe and illustrate in Figures 1-5 a single connector assembly (10) having a single housing (12).

In Figures 6-10, Denovich et al. illustrate an alternative connector assembly (110) having a carrier section (114) and a housing (112). Figure 10 illustrates two such connectors (110) positioned adjacent each other, side-by-side in a row. See Denovich et al. col. 3, lines 46-51. Notably, Denovich et al. does not describe that the housings (112) of the connectors (110) are connected or joined in any way, but rather describes only that the connectors (110) are positioned adjacent one another on a circuit board. Denovich et al. therefore describes neither the structure nor function of first and second connectors having respective housings wherein one of the opposing sides of the first connector is removably connected to one of the opposing sides of the second connector, whereby the first connector is separable from said second connector as electrical cabling is spliced thereto.

It is asserted in the Office Action that:

To perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Final Office Action dated August 5, 2003 page 7. Applicant respectfully traverses this assertion as overlooking clear recitations that are not found in the prior art and unfairly depriving Applicants of the patent protection which is believed to be entitled, and further submits that that the Examiner's position is contrary to controlling law.

It is well established that a patent applicant is free to recite features of an apparatus either structurally or functionally. In re Schreiber, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997); In re Swinheart, 169 USPQ 226, 228 (CCPA 1971). In construing a patent claim for examination, it is

improper to disregard the preamble and functional limitations, including functional clauses commonly used in recitations such as "adapted to", "whereby", and "thereby." Pac-Tec, Inc. v. Amerace Corp., 14 USPQ2d 1871, 1876 (Fed. Cir. 1990); In re Venezia, 189 USPQ 149 (CCPA 1976). It is therefore submitted that the functional recitations of the patent claims are limitations in a patentable sense and must be considered for proper examination of the case.

Boron et al. describes a splice connector (10) including interfitting couplings (16) and (18) enclosed by an outer case (20). Boron et al., like Denovich et al., neither describes nor suggests, as recited in claim 15, different housings of different connectors being removably connected to one another and separable from one another as electrical cable is spliced thereto. Boron et al. is therefore respectfully submitted to add nothing to the teaching of Denovich et al. with respect to the present invention.

It is therefore submitted that the combination of references fails to teach each of the recitations of claim 15, or any desirability of removably connected housings which are separable during splicing of cables. As explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). Denovich et al. in view of Boron et al. do not disclose the combination of elements recited in claim 15 and do not motivate, suggest, or teach the specific combination of recitations of claim 15.

Claim 15 is therefore submitted to be patentable over Denovich et al. in view of Boron et al.

Likewise, the detail recitations of Claims 18-25, when considered in combination with the recitations of claim 15, are submitted to be patentable over Denovich et al. in view of Boron et al.

Claim 29 is cancelled.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-15, 18-25 and 29 be withdrawn.

The rejection of Claims 16-17 and 26 under 35 U.S.C. § 103 as being unpatentable over Denovich et al. in view of Boron et al., and Teytaud (U.S. Patent No. 4,219,249) is respectfully traversed.

Claims 16 and 17 each depend from independent Claim 15, which for the reasons set forth above is submitted to be patentable over Denovich et al. in view of Boron et al.

Teytaud adds nothing to the combination of Denovich et al. and Boron et al. with respect to Claim 15. Teytaud describes an ultrasonic welding process for the manufacture of alternator slip ring assemblies. The alternator slip ring does not include first and second housings removably connectable to one another and separable during use of the slip ring.

Denovich et al., Boron et al., and Teytaud, separately and in combination, fail to disclose different housings of different connectors being removably connected to one another and separable from one another as electrical cable is spliced thereto. As noted above, there must be some motivation, suggestion or teaching in the cited art of the desirability of making the specific combination that was made by Applicants. It is respectfully submitted that Denovich et al. in view of Boron et al. and Teytaud do not disclose the combination of elements recited in claim 15 and do not motivate, suggest, or teach the specific combination of recitations of claim 15.

Claim 15 is therefore submitted to be patentable over Denovich et al. in view of Boron et al. and Teytaud, and when the detail recitations of claims 16 and 17 are considered in combination with the recitations of claim 15, claims 16 and 17 are also submitted to be patentable over Denovich et al. in view of Boron et al. and Teytaud.

Claim 26 recites a connector stick device comprising a plurality of connectors, each of said connectors having opposing sides, and "wherein at least one of said opposing sides of each said connector is removably connected to one of said opposing sides of an adjacent said connector by an ultrasonic weld, and further wherein each said connector is separable from said adjacent connector by breaking said ultrasonic weld."

For the reasons set forth above, the combination of the cited art fails to disclose each of the structural and functional recitations of claim 26, and fails to teach or suggest any desirability of removably connecting different connectors with an ultrasonic weld, wherein the connectors are separable by breaking the ultrasonic weld as recited in claim 26. Applicants note that welded connections are ordinarily intended for permanent connection of joined parts. Nothing in the cited art suggests that breaking a weld in a connector joined to a stick of connectors is desirable or advantageous.

Claim 26 is therefore submitted to be patentable over Denovich et al. in view of Boron et al. and Teytaud.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 16-17 and 26 be withdrawn.

With respect to the newly added claims, Applicants submit that the cited art neither describes nor suggests the recitations therein.

Claims 30-33 depend from claim 26, which is submitted to be patentable for the reasons set forth above. When the recitations of claims 30-33 are considered in combination with the recitations of claim 26, claims 30-33 are likewise submitted to be patentable over the cited art.

Claim 34 recites a connector assembly for splicing cable with an automatic crimping tool, said connector assembly comprising "a plurality of nonconductive housings joined to one another to form a connector stick, each of said housings comprising at least one opening for

passage of electrical cabling, wherein said plurality of joined nonconductive housings are separable from one another as the cable is spliced thereto."

For the reasons set forth above, the cited art does not describe or suggest nonconductive housings joined to one another in a connector stick which are separable from the connector stick as cabling is coupled to the connectors. None of the cited art describes any desirability for a connector stick as recited in claim 34.

Claim 34 is therefore submitted to be patentable over the cited art, and when the recitations of claims 35-38 are considered in combination with the recitations of claim 34, claims 35-38 are likewise submitted to be patentable over the cited art.

With respect to the method claims 39-41, it is submitted that as the cited art is not suggestive of the structure and function of the connector stick of the present invention as explained in detail above, the cited art is not suggestive of the recited method in claims 39-41.

Claims 39-41 are therefore submitted to be patentable over the cited art.

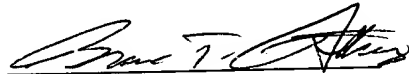
Claim 42 recites a stick of electrical connectors comprising "a plurality of electrical connectors disposed side-by-side, each of said connectors having a non-conductive housing, said connectors being joined together by respective ultrasonic welds between adjacent said housings, wherein said connectors are individually separable from the stick by breaking said ultrasonic welds."

For the reasons set forth above, it is submitted that the cited art is not suggestive of connectors joined with ultrasonic welds, wherein the connectors are individually separable by breaking the welds.

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In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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